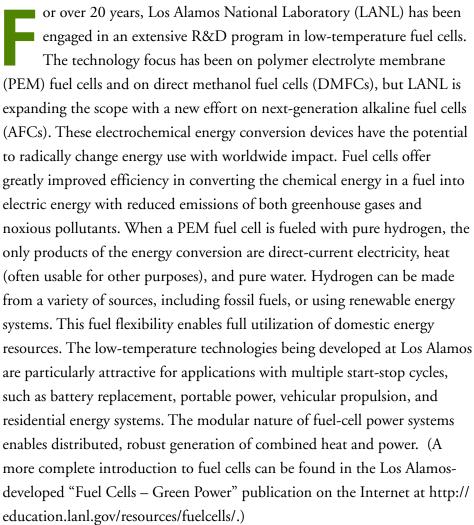


hydrogen, natural gas, and petroleum fuels, and fuel gases derived from coal and biomass. What makes fuel cells unique is that they can use fuels without combustion, simply by chemical reactions, making them extremely clean and efficient.

— National Energy Policy Development Group Report, May 2001







Fuel Cell R&D at Los Alamos

The Los Alamos research program ranges from fundamental investigation of ion transport and electrochemistry to materials development and component optimization. In addition to fuel cells, current R&D includes supporting technologies such as hydrocarbon fuel reforming to generate a





LOW-Temperature Fuel Cells at Los Alamos National Laboratory



hydrogen-rich gas stream on demand, gas-cleanup technologies to make such streams compatible with PEM systems, and advanced sensors and controls. Theory and model development further enable knowledge-based innovation. Current research goals include cost reduction and durability and performance improvement. Major sponsors include the Department of Energy (DOE) Office of Transportation Technologies and Office of Power Technologies, the Defense Advanced Research Projects Agency, military commands, and industry. The maturity of this research effort and the multi-disciplinary nature of the Los Alamos National Laboratory, with access to world-leading capabilities and top-notch scientists and engineers in all relevant fields, make this program a unique national asset. Up-to-date program information can be found on the web at http://www.lanl.gov/mst/fuelcells/.



The Laboratory has worked with industry on fuel cell and related technology since the mid-1970s, through both the government-funded core research program and through cooperative research and development agreements (CRADAs) and licensing. Intellectual Property available for licensing ranges from techniques for cost reduction, to performance improvement, to innovative system

approaches. Los Alamos fuel cell intellectual property is at the heart of several products under commercial development. To find out more about licensing opportunities or options for CRADAs, visit the Internet at http://www.lanl.gov/worldview/opportunities/.

Los Alamos Fuel Cell Awards



Partnership for a New Generation of Vehicles Medal, 1998

In a ceremony in the White House complex, Presidential Science Advisor Neal Lane, acting on behalf of then Vice President Al Gore, recognized 15 scientists from the automotive industry, its suppliers, and the Federal government for their work on environmentally friendly fuel cell technology pursued under the collaborative industry-government Partnership for a New Generation of Vehicles (PNGV).



DOE Energy 100 Award, 2001

This initiative honors 100 of the best scientific and technological accomplishments of the Department of Energy during this century.



DOE Energy @ 23 Award, 2001

Los Alamos Fuel Cells for Transportation were recognized as one of the scientific and technological innovations developed by DOE between 1977 and the year 2000 that demonstrated benefits to the American public, a contribution to U.S. competitiveness in the global marketplace and the potential for significant future growth.

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